

## Choice of Institution: Changing Student Attendance Patterns in the 1990s

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Along with access, choice among a broad variety of institutions is a hallmark of the American system of postsecondary education. During the 1990s, the number of undergraduates enrolled in U.S. institutions increased by 9 percent, from 11.3 million in fall 1989 to 12.4 million in fall 1999.<sup>1</sup> Where these students chose to enroll changed in subtle but significant ways during the 1990s. Moreover, shifts in enrollment patterns differed according to student characteristics. As a result, the landscape of higher education changed significantly during this decade.

The purpose of this issue brief is to describe changes in the distribution of students among the major types of postsecondary institutions during the 1990s. This brief does not address trends in access, or whether the share of individuals with various characteristics (e.g., low family income) who enrolled in higher education rose or fell. Rather, it describes where individuals who participated in higher education enrolled and how those patterns changed during the 1990s.

### MAJOR TRENDS

The largest change in the distribution of undergraduate enrollment in the 1990s occurred at public two-year and for-profit less-than-four-year institutions. In 1989, 39 percent of all undergraduates attended public two-year community colleges (see **Table 1**). By 1999, 41 percent of undergraduates attended these institutions. Conversely, the share of undergraduates attending for-profit less-than-four-year institutions dropped from 5 percent to 3 percent during the same period. A change of 2 percentage points is equivalent to approximately 248,000 students in 1999. By gaining these students, enrollment in community colleges grew by 14 percent during the 1990s, or approximately 5 percentage points more than enrollment in higher education as a whole (see **Figure**). At for-profit less-than-four-year institutions, the loss of these students resulted in a 32 percent enrollment decline, when higher education grew by 9 percent overall. These institutions' loss of enrollment likely occurred because the number of for-profit institutions participating in the federal student aid programs fell by approximately 1,000 from the beginning of the decade to the end (King, 2003).<sup>2</sup>

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<sup>1</sup> Unless otherwise noted, the sources for all data reported in this issue brief are the U.S. Department of Education, National Center for Education Statistics, 1989–90 and 1999–2000 National Postsecondary Student Aid Studies (NPSAS). Because of discrepancies in sampling methodology between the 1989–90 and 1999–2000 surveys, only students who enrolled in the fall are included in this analysis. In both studies, more than three-quarters of those surveyed enrolled in the fall term.

<sup>2</sup> It is important to note that these trends will differ tremendously by state, as both the relative size of the various higher education sectors and student enrollment decisions vary regionally. Unfortunately, the NPSAS data do not currently allow for state-level analyses.

## DEPENDENCY STATUS

Students are considered independent if they are age 24 or older, are married, have children or other dependents, or are a veteran of the military. All other students are considered dependent. In both 1989 and 1999, slightly fewer than half of all undergraduates were independent.<sup>3</sup> The shift away from for-profit institutions was more pronounced among independent students than their dependent peers. The share of independent students attending for-profit less-than-four-year institutions dropped from 7 percent to less than 5 percent. The proportion of these students attending both public and private not-for-profit four-year institutions increased slightly.

Dependent students were less likely to attend community colleges than independent students. Nonetheless, the share of dependent undergraduates attending community colleges increased from 26 percent in 1989 to 30 percent in 1999. At the same time, the share of dependent students attending all other types of institutions appeared to decline slightly, with the largest drop at public four-year institutions.<sup>4</sup>

## INCOME

This issue brief reports income as a percentage of the federal poverty level. The federal poverty level is a better measure of family resources than income alone because it varies by family size and is adjusted annually for inflation. In 2003, the poverty level was \$9,573 for a single person and \$18,660 for a family of four with two dependent children. **Table 2** lists the poverty level for a range of family sizes and the income thresholds at 200 percent to 600 percent of those poverty levels.

**Table 3** outlines the distribution of dependent and independent students by their income in 1989 and 1999, as a percentage of the federal poverty level.<sup>5</sup> It shows little change among dependent students, but a shift up the income scale among independent students. The share of independent students with income equivalent to more than 400 percent of the poverty level increased from 16 percent to 23 percent, with a corresponding decrease at the lower income levels.

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<sup>3</sup> In fall 1989, 48 percent of undergraduates were independent. The share of students who were independent dropped to 46 percent in fall 1999.

<sup>4</sup> Generally, changes of less than a percentage point in the distribution of students should be interpreted with caution, as they may be due to sampling error.

<sup>5</sup> Half of independent students fall into the lowest income category. This group combines two types of students: those who come from low-income backgrounds and those who are “temporarily poor” because they have either stopped working or reduced the number of hours they work in order to attend college. Unfortunately, for this analysis, it is impossible to distinguish between these two groups.

## INCOME, DEPENDENCY STATUS, AND INSTITUTION CHOICE

**Table 4** details the distribution of students in 1999 by type of institution, dependency status, and income. To account for the large number of independent students at the bottom of the income scale, the lowest income category is divided into two groups: those with income at or below the poverty threshold and those with income between 101 percent and 200 percent of the poverty line.

Table 4 reveals several interesting patterns. First, it shows that among both independent and dependent students, as income rose, the likelihood of attending a for-profit institution decreased. Among dependent students, rising income also signaled a decreased likelihood of attending a community college. For example, 36 percent of dependent students with family income of no more than twice the poverty level attended community colleges, compared with 23 percent of dependent students whose family income was at least six times the poverty level. Dependent students from higher income families were more likely to attend public and private not-for-profit four-year institutions. In contrast, as independent students' income rose, the likelihood of attending a public four-year institution decreased. For independent students, the likelihood of attending a private not-for-profit college or university did not vary appreciably by income.

## CHANGES IN THE DISTRIBUTION OF STUDENTS

**Table 5** describes how the distribution of students among institutions changed among income and dependency groups between 1989 and 1999. Within each income category, there were substantial differences by dependency status, both in the distribution of students and in how the distributions changed during the 1990s.

200% of poverty or less (36 percent of all undergraduates in 1999). The two sectors that saw substantial changes in their share of low-income enrollment were community colleges and for-profit less-than-four-year institutions. Dependent students with the lowest incomes were more highly concentrated at community colleges at the end of the 1990s than they had been in 1989, but there was no significant change in the concentration of low-income independent students at community colleges. Both independent and dependent students were less highly concentrated at for-profit less-than-four-year institutions in 1999 than they had been in 1989.<sup>6</sup>

201% to 400% of poverty (32 percent of all undergraduates in 1999). The enrollment patterns of this group changed in complex ways during the 1990s. The concentration of dependent students at

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<sup>6</sup> As discussed above, the effect of changes in the distribution of students on each sector of higher education will vary, depending on the size of the student population in question and the size of each sector. For example, a gain or loss of one percentage point of all low-income undergraduates (approximately 45,000 students in 1999) will have a much larger effect on a small sector of higher education, such as for-profit institutions, than on a large sector, such as community colleges.

community colleges increased, but the share of independent students declined, preventing any significant change overall in community college enrollment among this income group. Likewise, an increase in the share of independent students enrolled at public four-year universities was offset by a decrease in the share of dependent students choosing these institutions. On the whole, the only overall change in this income group was a modest increase in the share of students enrolled at private not-for-profit colleges and universities.

401% to 600% of poverty (18 percent of all undergraduates in 1999). Like their counterparts at lower income levels, dependent students in this income group were more likely to choose community colleges (and less likely to choose public four-year institutions) in 1999 than they had been 10 years earlier. Conversely, independent students in this income group were more highly concentrated in public four-year institutions in 1999. This change was not enough to offset a decline in the share of dependent students who chose public four-year institutions, resulting in a net loss in the share of all undergraduates in this income group who attended these institutions.

601% of poverty or more (13 percent of all undergraduates in 1999). This group represented the largest increase in the share of students choosing community colleges, with corresponding decreases in the share of students attending both public and private not-for-profit four-year institutions. Because there are far fewer independent students than dependent students at this income level, differences by dependency status did not significantly influence the overall enrollment pattern.

## **MIDDLE-CLASS MELT?**

A major question that analysts have raised is whether dependent students from middle-income families have become less likely to choose certain types of institutions because their families make too much money to qualify for financial aid, but too little for the students to attend without assistance. Table 5 shows that dependent first-year students from families with incomes between 401 percent and 600 percent of poverty (approximately \$75,000 to \$110,000 annually for a family of four) were more heavily concentrated in community colleges at the end of the 1990s than they were at the beginning. The same pattern is evident among dependent students from lower and higher income families, as well. However, students from the middle-income group were more likely to choose public and private not-for-profit four-year institutions than students from either of the two lower-income groups.

## **SUMMARY**

Based on these data, the 1990s could be dubbed the “Decade of the Community College.” Dependent students at all income levels were more likely to choose these institutions at the end of the decade than

they were when it began, causing a substantial enrollment increase for public two-year institutions. Among the other major trends:

- For-profit less-than-four-year institutions experienced the largest loss in share of students, and a substantial absolute loss in enrollment, as this industry contracted in the wake of new federal oversight and regulation.
- Decreases in the share of dependent students choosing public four-year institutions generally were offset by increases in the share of independent students attending these institutions.
- Decreases in the share of upper-income students choosing private not-for-profit institutions were offset by enrollment gains among lower-income students.

Finally, these data illustrate that not only do independent and dependent students have very different enrollment patterns, but also these patterns changed in very different ways during the 1990s. Dependent students became more highly concentrated at community colleges while independent students moved away from for-profits and became more likely to enroll at public and private not-for-profit four-year institutions.

## REFERENCE

King, J. (2003). *2003 status report on the Pell Grant program*. Washington, DC: American Council on Education.

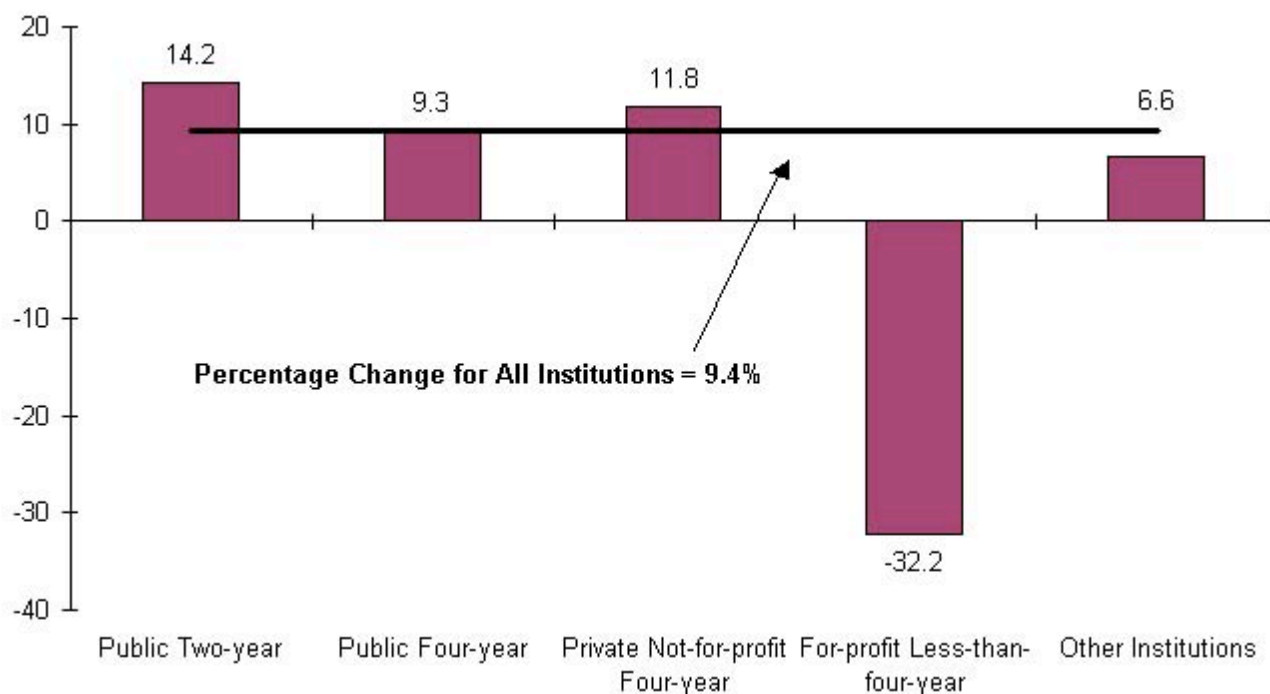
**TABLE 1: Distribution of Undergraduates, by Type of Institution: Fall 1989 and Fall 1999**

|                                   | Public<br>Two-Year<br>% | Public<br>Four-Year<br>% | Private<br>Not-for-Profit<br>Four-Year<br>% | For-Profit<br>Less-Than-<br>Four-Year<br>% | Other<br>Institutions<br>% |
|-----------------------------------|-------------------------|--------------------------|---|--|----------------------------|
| <b>All Undergraduates</b>         |                         |                          |   |  |                            |
| 1989–90                           | 39.1                    | 36.8                     | 16.3  | 5.1  | 2.7                        |
| 1999–2000                         | 40.8                    | 36.8                     | 16.7  | 3.1  | 2.6                        |
| <b>Dependent Undergraduates</b>   |                         |                          |   |  |                            |
| 1989–90                           | 26.3                    | 47.0                     | 21.6  | 3.1  | 2.1                        |
| 1999–2000                         | 30.3                    | 45.0                     | 21.1  | 1.8  | 1.8                        |
| <b>Independent Undergraduates</b> |                         |                          |   |  |                            |
| 1989–90                           | 53.2                    | 25.8                     | 10.5  | 7.3  | 3.3                        |
| 1999–2000                         | 52.9                    | 27.3                     | 11.6  | 4.7  | 3.5                        |

Source: U.S. Department of Education, National Center for Education Statistics. National Postsecondary Student Aid Study: 1989–90 and 1999–2000.

Note: The “other institutions” category includes public less-than-two-year, private not-for-profit two-year, and for-profit four-year institutions. Students who attended more than one institution in either fall 1989 or fall 1999 are excluded from all analyses.

**FIGURE: Estimated Percentage Change in Undergraduate Enrollment: Fall 1989 to Fall 1999**



Source: U.S. Department of Education, National Center for Education Statistics. National Postsecondary Student Aid Study: 1989–90 and 1999–2000. Estimates by author.

**TABLE 2: Poverty-Level Income Thresholds: 2002**

| Family<br>Size | Poverty<br>Level<br>\$ | Percentage of Poverty Level |            |            |
|----------------|------------------------|-----------------------------|------------|------------|
|                |                        | 200%<br>\$                  | 400%<br>\$ | 600%<br>\$ |
| 1              | 9,359                  | 18,718                      | 37,436     | 56,154     |
| 2              | 12,110                 | 24,220                      | 48,440     | 72,660     |
| 3              | 14,348                 | 28,696                      | 57,392     | 86,088     |
| 4              | 18,392                 | 36,784                      | 73,568     | 110,352    |
| 5              | 21,744                 | 43,488                      | 86,976     | 130,464    |
| 6              | 24,576                 | 49,152                      | 98,304     | 147,456    |

Source: U.S. Census Bureau.

**TABLE 3: Distribution of Undergraduates, by Percentage of Poverty Level: Fall 1989 and Fall 1999**

|           | 200%<br>or Less<br>%              | 201%<br>to 400%<br>% | 401%<br>to 600%<br>% | 601%<br>or More<br>% |
|-----------|-----------------------------------|----------------------|----------------------|----------------------|
|           | <b>All Undergraduates</b>         |                      |                      |                      |
| 1989–90   | 36.4                              | 34.6                 | 17.6                 | 11.5                 |
| 1999–2000 | 36.2                              | 32.3                 | 18.2                 | 13.2                 |
|           | <b>Dependent Undergraduates</b>   |                      |                      |                      |
| 1989–90   | 24.0                              | 35.8                 | 22.7                 | 17.5                 |
| 1999–2000 | 26.2                              | 35.4                 | 21.8                 | 16.7                 |
|           | <b>Independent Undergraduates</b> |                      |                      |                      |
| 1989–90   | 50.5                              | 33.2                 | 11.8                 | 4.6                  |
| 1999–2000 | 48.0                              | 28.8                 | 14.1                 | 9.2                  |

Source: U.S. Department of Education, National Center for Education Statistics. National Postsecondary Student Aid Study: 1989–90 and 1999–2000.

Note: In the 1989–90 National Postsecondary Student Aid Study, income data are missing for 11 percent of respondents who enrolled in the fall term. There are no missing income data in the 1999–2000 study.

**TABLE 4: Distribution of Undergraduates, by Type of Institution, Dependency Status, and Income: Fall 1999**

|                                   | Public<br>Two-Year<br>% | Public<br>Four-Year<br>% | Private<br>Not-for-Profit<br>Four-Year<br>% | For-Profit<br>Less-Than-<br>Four-Year<br>% | Other<br>Institutions<br>% |
|-----------------------------------|-------------------------|--------------------------|---|--|----------------------------|
| <b>All Undergraduates</b>         |                         |                          |   |  |                            |
| <i>All Students</i>               | 40.8                    | 36.8                     | 16.7  | 3.1  | 2.6                        |
| 200% of poverty or less           | 42.4                    | 34.8                     | 14.1  | 5.5  | 3.3                        |
| 201% to 400%                      | 42.2                    | 36.4                     | 16.5  | 2.4  | 2.6                        |
| 401% to 600%                      | 39.2                    | 39.2                     | 18.3  | 1.4  | 2.0                        |
| 601% or more                      | 35.4                    | 39.8                     | 21.9  | 1.1  | 1.8                        |
| <b>Dependent Undergraduates</b>   |                         |                          |   |  |                            |
| <i>All Students</i>               | 30.3                    | 45.0                     | 21.1  | 1.8  | 1.8                        |
| 200% of poverty or less           | 36.1                    | 40.4                     | 17.9  | 3.1  | 2.5                        |
| 201% to 400%                      | 31.7                    | 44.5                     | 20.3  | 1.6  | 1.9                        |
| 401% to 600%                      | 26.6                    | 48.3                     | 22.5  | 1.2  | 1.4                        |
| 601% or more                      | 23.0                    | 49.0                     | 26.0  | 0.8  | 1.3                        |
| <b>Independent Undergraduates</b> |                         |                          |   |  |                            |
| <i>All Students</i>               | 52.9                    | 27.3                     | 11.6  | 4.7  | 3.5                        |
| 200% or poverty or less           | 46.3                    | 31.2                     | 11.8  | 7.0  | 3.8                        |
| 100% of poverty or less           | 42.5                    | 33.6                     | 12.0  | 8.1  | 3.8                        |
| 101% to 200%                      | 50.3                    | 28.7                     | 11.5  | 5.8  | 3.8                        |
| 201% to 400%                      | 57.1                    | 25.0                     | 11.0  | 3.5  | 3.5                        |
| 401% to 600%                      | 61.3                    | 23.0                     | 10.9  | 1.7  | 3.1                        |
| 601% or more                      | 61.0                    | 20.8                     | 13.5  | 1.7  | 2.9                        |

Source: U.S. Department of Education, National Center for Education Statistics. National Postsecondary Student Aid Study: 1989–90 and 1999–2000.



**TABLE 5: Distribution of Undergraduates, by Income Group, Institution Type, and Dependency Status: Fall 1989 and Fall 1999**

|                                | Public<br>Two-Year<br>% | Public<br>Four-Year<br>% | Private<br>Not-for-Profit<br>Four-Year<br>% | For-Profit<br>Less-Than-<br>Four-Year<br>% | Other<br>Institutions<br>% |
|--------------------------------|-------------------------|--------------------------|---|--|----------------------------|
| <b>200% of Poverty or Less</b> |                         |                          |   |  |                            |
| <i>All Students, 1989</i>      | 40.1                    | 33.5                     | 13.5  | 9.3  | 3.6                        |
| <i>All Students, 1999</i>      | 42.4                    | 34.8                     | 14.1  | 5.5  | 3.3                        |
| Dependent Students, 1989       | 30.7                    | 40.8                     | 20.2  | 5.8  | 2.7                        |
| Dependent Students, 1999       | 36.1                    | 40.4                     | 17.9  | 3.1  | 2.5                        |
| Independent Students, 1989     | 45.4                    | 29.6                     | 9.7   | 11.2                                       | 4.1                        |
| Independent Students, 1999     | 46.3                    | 31.2                     | 11.8  | 7.0  | 3.8                        |
| <b>201% to 400% of Poverty</b> |                         |                          |   |  |                            |
| <i>All Students, 1989</i>      | 42.5                    | 36.8                     | 14.5  | 3.7  | 2.5                        |
| <i>All Students, 1999</i>      | 42.2                    | 36.4                     | 16.5  | 2.4  | 2.6                        |
| Dependent Students, 1989       | 28.4                    | 48.1                     | 18.4  | 2.9  | 2.2                        |
| Dependent Students, 1999       | 31.7                    | 44.5                     | 20.3  | 1.6  | 1.9                        |
| Independent Students, 1989     | 60.6                    | 22.5                     | 9.5   | 4.7  | 2.7                        |
| Independent Students, 1999     | 57.1                    | 25.0                     | 11.0  | 3.5  | 3.5                        |
| <b>401% to 600% of Poverty</b> |                         |                          |   |  |                            |
| <i>All Students, 1989</i>      | 35.9                    | 41.5                     | 18.6  | 2.1  | 2.0                        |
| <i>All Students, 1999</i>      | 39.2                    | 39.2                     | 18.3  | 1.4  | 2.0                        |
| Dependent Students, 1989       | 23.8                    | 51.4                     | 21.2  | 1.7  | 1.9                        |
| Dependent Students, 1999       | 26.6                    | 48.3                     | 22.5  | 1.2  | 1.4                        |
| Independent Students, 1989     | 62.7                    | 19.7                     | 12.8  | 2.9  | 2.0                        |
| Independent Students, 1999     | 61.3                    | 23.0                     | 10.9  | 1.7  | 3.1                        |
| <b>601% of Poverty or More</b> |                         |                          |   |  |                            |
| <i>All Students, 1989</i>      | 28.1                    | 41.9                     | 27.5  | 1.4  | 1.1                        |
| <i>All Students, 1999</i>      | 35.4                    | 39.8                     | 21.9  | 1.1  | 1.8                        |
| Dependent Students, 1989       | 20.5                    | 47.3                     | 30.1  | 1.1  | 1.1                        |
| Dependent Students, 1999       | 23.0                    | 49.0                     | 26.0  | 0.8  | 1.3                        |
| Independent Students, 1989     | 59.8                    | 19.5                     | 17.2  | 2.7  | 1.3                        |
| Independent Students, 1999     | 61.0                    | 20.8                     | 13.5  | 1.7  | 2.9                        |

Source: U.S. Department of Education, National Center for Education Statistics. National Postsecondary Student Aid Study: 1989–90 and 1999–2000.